## **ABSTRACT**

The present invention discloses novel methods for producing foreign polypeptides in a host plant using recombinant viruses through functional complementation systems. The methods involve constructing suitable recombinant viral vectors that are capable of systemic infection and infecting the host plants with one or more recombinant viral vectors. The methods are also directed to infecting a host plant that is transgenic for expressing replicase genes of a virus, wherein the transgenic plant expressing a virus replicase genes complements the virus replicase function. The invention also discloses a method for producing a full-length antibody in a host plant using viral vectors.